B. Amendment to the Claims

Please amend claims 1-6 as follows. A listing of claims in the application is provided.

1. (Currently Amended) An optical waveguide device comprising:

an optical waveguide layer; and

a light-receiving element having a plurality of light-receiving portions for receiving light propagated through the optical waveguide layer,

wherein the optical waveguide layer propagates light emitted from a plurality of light-emitting sources and has a [[first]] light direction-altering portion, which alters the direction of light propagated in the optical waveguide layer and directs the light to the light-receiving element,

wherein each of the light-receiving portions receives light from the [[first]] light direction-altering portion, and

wherein the [[first]] light direction-altering portion has plural light-reflecting surface portions, each of which reflects light propagated from a corresponding light-emitting source.

2. (Currently Amended) The optical waveguide device according to claim 1, wherein the optical waveguide layer is further provided with a light-emitting element, and ~~a second~~ the light direction-altering portion ~~for receiving~~ receives light emitted from the light-emitting element at an angle to an in-plane direction of the optical waveguide layer, wherein the ~~second~~ light direction-altering portion and the light-emitting

element are in such a relative position that light emitted from the light-emitting element is directed into the optical waveguide layer.

3. (Currently Amended) The optical waveguide device according to claim 1 or 2, wherein the light-receiving element comprises the plurality of light-receiving portions arranged in a circular form, and the [[first]] light direction-altering portion allows the light-receiving element to receive the light propagated from all directions in the optical waveguide layer, and the light-receiving element discriminates a transmitting source of the received light based on a light intensity distribution that varies depending on the position of the transmitting source of light.

4. (Currently Amended) The optical waveguide device according to claim 3, wherein the [[first]] light direction-altering portion is in a form of a hemispheric or conic structure embedded in the optical waveguide layer.

5. (Currently Amended) The optical waveguide device according to claim 1 or 2, wherein the light-receiving element includes at least a plurality of light-receiving portions that are linearly arranged, and the [[first]] light direction-altering portion allows the light-receiving element to receive light propagated from a predetermined region in the optical waveguide layer, and the light-receiving element discriminates the transmitting source of the received light based on a light intensity distribution that varies depending on the position of the transmitting source of light.

6. (Currently Amended) The optical waveguide device according to claim 5, wherein the [[first]] light direction-altering portion is in a form of a half cylindrical or triangular structure laid sideways and embedded in the optical waveguide layer.

7. (Previously Presented) The optical waveguide device according to claim 3, wherein the device is configured to propagate incident light from the light-emitting element in every direction in the optical waveguide layer, and to detect the optical signal discriminating the position of the light-emitting element by using the light-receiving element, so as to simultaneously receive optical signals from a plurality of light-emitting elements in the same optical waveguide layer with one single light-receiving element.

8. (Previously Presented) The optical waveguide device according to claim 3, wherein the device is configured to propagate incident light from the light-emitting element at a specific emission angle in the optical waveguide layer, and to detect the optical signal by the light-receiving element discriminating the position of the light-emitting element so as to simultaneously receive optical signals from a plurality of light-emitting elements in the same optical waveguide layer with one single light-receiving element.

9. (Previously Presented) The optical waveguide device according to claim 5, wherein the device is configured to propagate incident light from light-emitting elements as parallel beams in a specific direction in the optical waveguide layer, and to detect the optical signals by the light-receiving element discriminating the positions of the light-emitting elements so as to simultaneously receive optical signals from the light-emitting elements in the same optical waveguide layer with the light-receiving element.

10. (Cancelled)

11. (Previously Presented) The optical waveguide device according to claim 1, wherein an electric wiring is provided on the surface of the optical waveguide layer to drive the optical element.

12. (Previously Presented) The optical waveguide device according to claim 1, wherein the device further comprises a relay means that receives propagated light, performs optical/electric (OE) conversion, performs electric/optical (EO) conversion to reproduce optical signals, and causes the light to propagate in the optical waveguide layer in a predetermined mode of propagation.

13. (Previously Presented) A layered substrate comprising an electric circuit board and an optical waveguide device according to claim 1 provided thereon with electric connections to operate an electronic equipment where interconnection of all or a

part of the signals from the electric circuit is carried out by exchange of optical signals through the optical waveguide device.

14. (Original) The layered substrate according to claim 13, wherein the optical waveguide device is embedded within an electric circuit multilayer substrate.

15. (Previously Presented) The layered substrate according to claim 13, wherein the optical waveguide device is multilayered and connected to an electric circuit board and an electronic chip.

16. (Previously Presented) An electronic equipment having an optical wiring using a layered substrate according to claim 13 and multi-bit wirings between a plurality of electronic chips for system operation.